

# CASE HISTORY

## SDI'S MagTracer QUICKLY IDENTIFIES EXISTING WELLS IN MINE DRIFT

### APPLICATION

Mine Drilling and Active Ranging

### TECHNOLOGY

MagTracer - Active Ranging System,  
Falcon EM MWD and gyroMWD

### LOCATION

Saskatchewan, Canada

### CUSTOMER CHALLENGE

The customer had two initial boreholes drilled by Scientific Drilling (SDI), utilizing their gyroMWD and Falcon EM. These boreholes were intended to be conduits to carry power cables between two new substations (one at surface and one ~500 m underground), however, the uncertainty of the position of the mineshaft relative to the accurately placed wellbores made them difficult to locate. The customer drilled several 2" holes into the wall, attempting to hit one of the wells behind the mineshaft. After several unsuccessful attempts, SDI was selected to locate the boreholes, using advanced magnetic ranging technology, to ensure any additional drilling time and associated costs were avoided.

### SCIENTIFIC SOLUTION

Scientific Drilling's MagTracer was run on wireline into the existing boreholes. A BHA with SDI's Falcon EM was then selected to range toward the bottom (toe) of the existing wells. After multiple shots with SDI's Falcon EM system, the customer was able to identify the position of the existing wells, allowing them to accurately open the wall of the mineshaft, and continue operations.

### CUSTOMER VALUE

SDI mobilized personnel, technology and completed this complex operation in less than a week. The customer was able to locate the wells on the first attempt due to the high accuracy data delivered by SDI's MagTracer. The streamlined operation saved the customer significant time and money, allowing them to quickly move ahead with the excavation and run the cables to finish out the project.

### CUSTOMER TESTIMONIAL

"After contracting Scientific Drilling to directionally drill our two boreholes at Cameco McArthur River mine, they were brought back to assist in the physical locating of the holes from the underground drift. SDI employed Active Ranging technology as a unique application to pinpoint the location of the boreholes, providing Cameco with the confidence they needed to successfully develop towards the boreholes."

- Lead Engineer

